

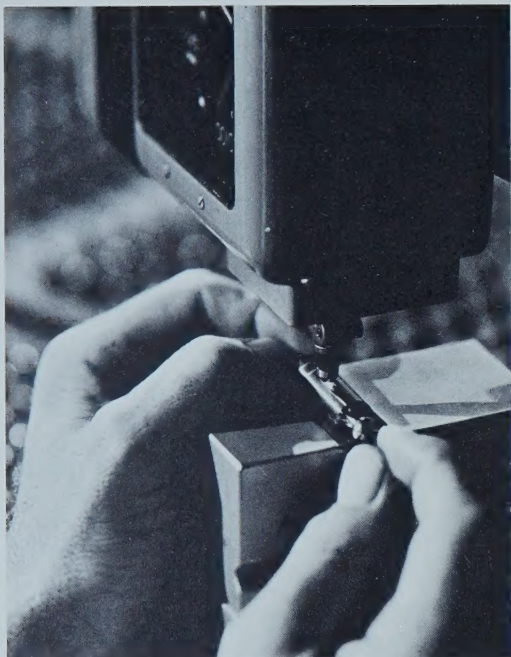
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Abex

CORPORATION

1966 Annual Report





Skilled hands and disciplined minds of Abex people are intangible assets not listed in the columns of our financial reports. Yet, the success of a business enterprise is largely dependent upon its human resources. The people of Abex give the company life, direction and vitality to grow and serve. They are our greatest asset.

ANNUAL MEETING: The next annual meeting of the shareholders will be held at 10 a.m. on Tuesday, April 25, 1967 in New York City. Proxies will be requested for the meeting. The notice of the meeting and proxy statement will be mailed on or about March 24th.

Abex Corporation 1966 Annual Report

Directors and Officers

Board of Directors

KEMPTON DUNN
Chairman

ROBERT W. BIGGS
President and Director
The Brush Beryllium Company

TILDEN CUMMINGS
President and Director
Continental Illinois National Bank
and Trust Company of Chicago

DR. CARL F. FLOE
Vice President-Research Administration
Massachusetts Institute of Technology

ALFRED S. FOOTE
Senior Vice President and Director
Morgan Guaranty Trust Company of
New York

ALBERT P. GAGNEBIN
President and Director
International Nickel Company
of Canada Limited

RODNEY C. GOTT
President and Director
American Machine and Foundry
Company

KENNETH H. HANNAN
Executive Vice President and Director
Union Carbide Corporation

DEVEREUX C. JOSEPHS
Director
New York Life Insurance Company

WILLIAM T. KELLY, JR.
President

THOMAS W. RUSSELL, JR.
First Vice President

GEORGE M. SCHURMAN
President and Director
The National Bag Corporation

GILBERT H. SCRIBNER, JR.
President and Director
Scribner & Co.

JOHN P. STEVENS, JR.
Director and Former Chairman
J. P. Stevens & Co., Inc.

MAURICE N. TRAINER
Former President
Abex Corporation

WILLIAM B. GIVEN, JR.
Honorary Chairman

Executive Officers

KEMPTON DUNN
Chairman

WILLIAM T. KELLY, JR.
President

THOMAS W. RUSSELL, JR.
First Vice President

KENNETH A. ANDERSON
Vice President

N. GEORGE BELURY
Vice President

CYRUS E. BRUSH
Vice President

RAYMOND A. FRICK
Vice President

FRANCIS B. HERLIHY
Vice President

VICTOR L. PERSBACKER
Vice President-Finance

RAYMOND H. SCHAEFER
Vice President

MAYNARD B. TERRY
Vice President

GILFRY WARD
Vice President

HOWARD C. BUSCHMAN, JR.
Secretary and General Counsel

OWEN B. COTTLE
Treasurer

RUSH M. FORQUER, JR.
Comptroller

Principal International Officers

ALLAN C. MAC DONALD—Canada

HOMER PARSONS—Mexico

STOCK TRANSFER AND DIVIDEND DISBURSING AGENT: Bankers Trust Company, 16 Wall Street, New York, N. Y.

REGISTRAR OF COMMON STOCK: Chemical Bank New York Trust Company, 20 Pine Street, New York, N. Y.

Highlights

	1966	1965	1964
Shipments	\$277,398,557	\$260,168,235	\$241,478,130
Net earnings	12,827,047	11,104,486	9,762,039
Special item—loss on sale of forging facilities less related taxes on income	—	644,012	—
Net earnings from each dollar of shipments	4.6¢	4.3¢	4.0¢
Shareholders' equity	121,422,501	114,968,723	110,507,961
Net earnings per dollar of shareholders' equity ..	10.9¢	9.8¢	9.0¢
Per common share			
Net earnings	3.49	3.01	2.64
Special item of loss	—	.18	—
Cash dividends	1.575	1.425	1.25
Shareholders' equity	33.05	31.18	29.84

Sales by Product Groups—1966

	Amount in Millions	Per Cent of Total
Friction Products	\$ 44.3	16%
Hydraulic Products	67.8	24
Railroad Products	76.6	28
Cast Metal Products	88.7	32
Total	\$277.4	100%

To the Shareholders:

Our annual report to shareholders provides an opportunity to review our progress during the year, to convey to you in words and pictures what the company is doing, and to indicate the direction of its future progress.

Last year set new records with the highest sales and earnings in history. Sales rose for the sixth consecutive year and reached \$277,399,000, a gain of 7% over the \$260,168,000 reported in 1965.

Net earnings increased for the fifth straight year and reached \$12,827,000, up 16% from \$11,104,000 in the pre-

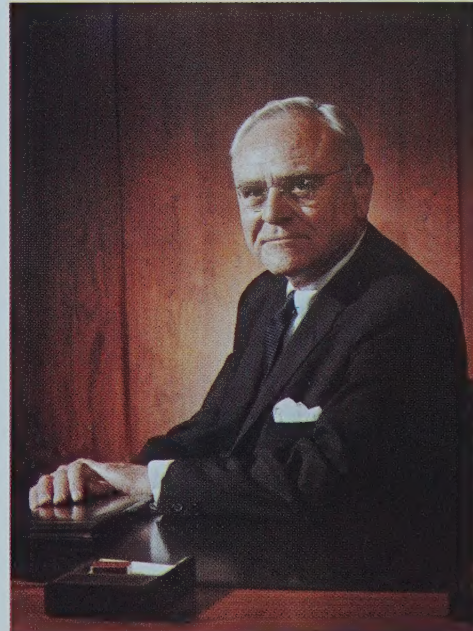
ceding year. Net earnings per share rose to a new record of \$3.49, compared with \$3.01 in 1965, after adjusting for the two-for-one stock split which was authorized by the stockholders last year at the Annual Meeting.

Shareholders will recall that Abex sold its forging business late in 1965. If total shipments for 1965 were reduced by the amount of forging sales in that year, the increase in shipments for 1966 would be 16% instead of 7% and the increase in earnings between the two years would remain at 16%.

Dividends paid in 1966 amounted to



KEMPTON DUNN
Chairman



WILLIAM T. KELLY, JR.
President

\$1.57¹/₂ compared with \$1.42¹/₂ in 1965, adjusted for the stock split. The annual dividend rate was raised for the third consecutive year. Following the stock split, the rate on the new shares was increased in June to \$1.60. The December payment was the 258th consecutive quarterly dividend since the company was established in 1902.

The booming economies of the United States and Canada created a strong demand for our products and sales gains were achieved in each of our four present product groups. Orders received during the year exceeded \$300,000,000 for the first time and the backlog of unfilled orders at year-end was \$109,700,000, compared with \$84,400,000 a year earlier.

Total sales also increased in our international operations, but government controls imposed in the United Kingdom and monetary restrictions in West Germany slowed the pace of business in those countries which, in conjunction with other factors explained later in this report, adversely affected our operating results.

The year's record sales required most of our plants to operate at near capacity. In anticipation of this demand, we initiated an expansion program in 1965. Capital expenditures last year amounted to \$15,224,000, compared with \$11,364,000 in 1965. Present plans call for capital expenditures in 1967 of

about \$16,000,000, compared to depreciation of \$13,000,000.

Stockholders voted at the Annual Meeting to change the company's name to Abex Corporation. The names of subsidiary companies in our Canadian and International operations were changed also. We now have a worldwide corporate identity that will strengthen and enhance all of our marketing and advertising programs.

Changes were made during the year in the organizational and operating structure of the company. The Electro-Alloys Division, a producer of heat-resistant castings, was combined with the Engineered Products Division. This move will integrate the capabilities of the two units and provide greater over-all efficiency for the group.

Our relations with employees were generally satisfactory although there were two strikes, mentioned later in this report, which involved a small number of personnel.

Shareholders have been advised of the proceedings instituted by the Federal Trade Commission to force divestiture of The S. K. Wellman Company acquired in 1963. The Commission's Hearing Examiner issued a ruling adverse to the company's position in August 1966 and the case is now awaiting review by the full Commission.

Some Supreme Court decisions in the past few years have contributed a

great deal of uncertainty in the interpretation of the anti-trust laws, and it is not possible to predict the outcome of this case or to estimate when it will be concluded.

During the year several management changes occurred. John S. Hutchins, president since 1963, was elected vice chairman in February 1966. Mr. Hutchins retired as an officer and director of the company at the end of 1966 after forty-one years of loyal and effective service.

William T. Kelly, Jr., first vice president and a director, was elected president and chief operating officer in February 1966. He has been with the company since 1928.

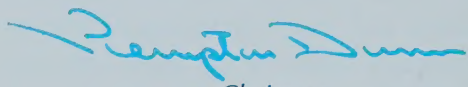
Thomas W. Russell, Jr., vice president, was elected first vice president and a director in October. Mr. Russell has twenty-one years of service.

Kenneth A. Anderson, director of personnel services, was elected a vice president of the company in September. He joined Abex in 1944.

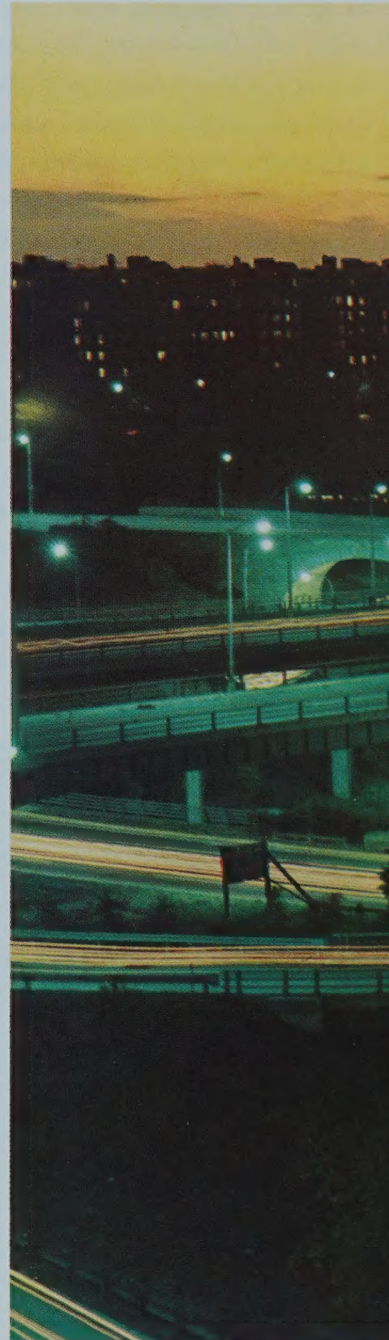
Dr. Carl F. Floe, vice president—Research Administration of Massachusetts Institute of Technology, was elected a director in June.

Abex Corporation continued to make excellent progress in 1966. We enjoyed the benefits of the prosperous economy which this country has been experiencing for several years, and we have utilized the opportunity to

broaden the base of our products and markets. This has expanded the future earning capacity of the company. Even more important, there is an alert awareness of the vital necessity to meet and cope with the forces of change which are at work throughout the world today. We must keep pace with the social and political changes as well as the rapid advances in science and technology and their impact on the industrial world.


Chairman


President



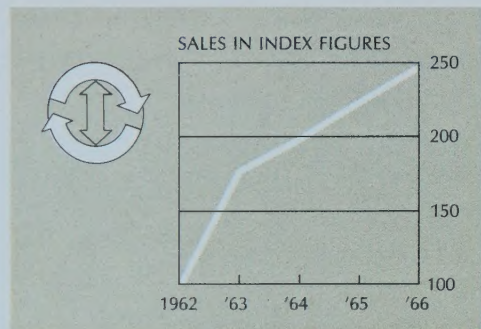
Abex Products in a Changing World



The scope and speed of change in our times is easily seen in both urban and industrial areas. Easily seen, too, is that most of the change is attributable to science and technology. Today's greatest challenge then, is to be prepared with products and services that will meet the changing needs of tomorrow.

This is our goal at Abex.

Friction Products

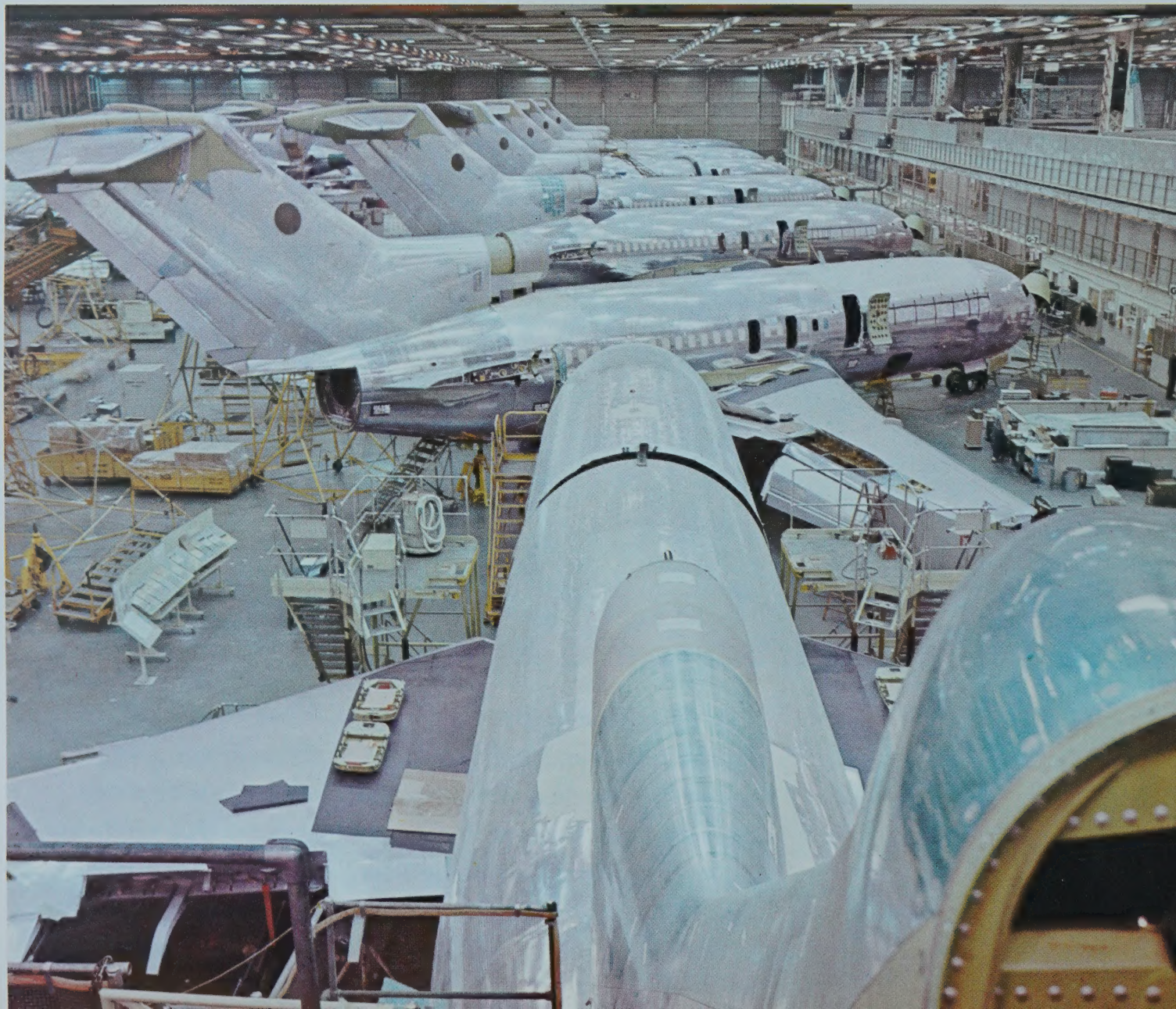


Sales of friction products in 1966 amounted to \$44,300,000, an 11% gain over 1965. Sales increases were achieved by all divisions in the group.

Friction products of the type manufactured by the company are sold for three major applications—automotive, aircraft and industrial.

The automotive industry experienced another year of high production in the United States, Canada and in Europe with the exception of the

United Kingdom. Consequently, our sales to vehicle manufacturers increased, particularly the sales of disc brake lining in Europe and strips and blocks for trucks and buses in the United States. Disc brakes for the front wheels of passenger cars have become very popular on European cars, creating a strong demand for disc lining, and our French company has enjoyed a large share of this market. There is a significant trend toward disc brakes in



the United States, and our American Brakeblok Division is presently supplying disc lining to some brake manufacturers. We expect this volume to increase substantially in the next few years.

The world's vehicle population now exceeds 170 million and it continues to grow, creating a larger and larger market for replacement brake lining. An important portion of our replacement lining is distributed through more than 7,500 automotive parts wholesalers in many countries of the world. Some of these sales are under our own brand names while the balance is sold under numerous private brand labels.

The sales of aircraft friction products continue to grow rapidly with the increased use of the airplane as a means of travel and transport. Abex pioneered in the research and development of friction products for aircraft, and our products are qualified on most of the world's major airplanes. The outlook is bright for this product line.

Industrial friction products are vital parts in transmissions, clutches and brakes for mobile equipment used in construction, mining, materials handling, farming and many other activities. The products are of both metallic and non-metallic type, depending upon the application and customer prefer-

The world's rapidly expanding vehicle population creates greater demand for the brake, clutch and transmission products made by Abex.



Farms are run with fewer people and more machines—a growing market for the clutch and transmission parts we manufacture.

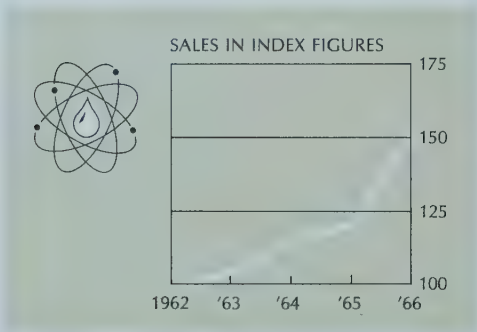
Boeing 727's are among the increasing number of commercial and military aircraft which utilize our friction products and hydraulic equipment.

ence. With the constantly increasing use of machines to do more and more of the world's work, the market for our friction products grows each year.

We have developed and patented a new non-metallic friction product which provides higher energy absorption and other favorable characteristics for especially severe service. It went into volume production in 1966.

Industrial friction products are sold to many equipment manufacturers and to an ever increasing replacement market. S. K. Wellman Division sells replacement parts through a system of independent wholesalers in the United States, Canada and other countries.

Hydraulic Products



Sales of hydraulic products in 1966 amounted to \$67,800,000, a 27% gain over 1965. This unusually large increase in shipments was caused by large requirements for military and

commercial aircraft, coupled with high sales for industrial equipment in the United States.

The unprecedented demand for all types of military and commercial aircraft and the high level of activity in the aerospace industry resulted in record orders and shipments of our aerospace hydraulic products.

Abex participates in this market with several important product lines—a variety of pumps, motors and sub-

systems; hydraulic control equipment including servovalves, servoactuators and flight control systems; and with landing gear and machined structural components.

Our products are used on most of the new commercial and military airplanes and helicopters in the United States, Canada and Europe. They are also on many missiles and space vehicles.

The backlog of orders on the books



of the aircraft manufacturers is so great that it will require several years to produce these planes. A large portion of this backlog is for commercial planes, and our sales for these have been increasing rapidly. This industry situation will create a strong demand for Abex aerospace products for several years.

Our aerospace hydraulic manufacturing facilities are operating at full production, and expansion of capacity



(Top) Tractors represent just one type of construction machinery utilizing hydraulic pumps, friction products and castings in ever growing volume.

(Above) A major cost reduction in manufacturing and distribution is accomplished through greater mechanization of materials handling—where hydraulic equipment and friction products are essential.

(Left) This Navy vessel is being equipped with sophisticated Abex hydraulic equipment to facilitate transfer of cargo at sea.

is planned for 1967. The outlook for the aircraft industry and our products is excellent.

Our industrial hydraulic products include pumps, motors, controls and systems which have wide application in a number of industries. Many types of machinery used in construction, mining, metalworking, marine and a myriad of other industries use hydraulic power to actuate certain working parts of the machines.

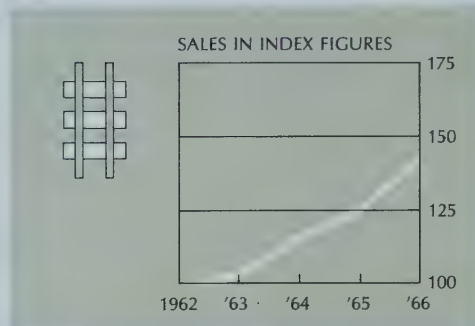
In the latter part of the year, Denison Division received the largest group of orders in its history. It was awarded contracts for hydraulic equipment to facilitate cargo handling on several United States naval vessels. These orders included unique hydraulic winch machinery which compensates for the motion of ships while transfer-

ring cargo by cable between two vessels at sea. Most of this equipment is scheduled for delivery in 1967.

The development of new and more efficient products is always necessary. A new pump has been developed and patented in recent years which has a novel design and method of actuating the vanes. This unit, which went into volume production in 1966, provides distinct advantages on certain types of tractors and other mobile machinery.

The continuous upward trend of mechanization and automation brings increasing use of hydraulic power for actuation and control. We are firmly established in the major markets for our products in the United States and Europe and we expect that our sales of these products will continue to increase.

Railroad Products



Sales of products for the railroads in the United States and Canada amounted to \$76,600,000. This was a 13% gain over the preceding year and the fifth consecutive year of rising volume.

About 85% of our shipments to railroads are for the replacement of wearing parts, and the high level of operations created a strong demand for them. A greater number of new freight cars and locomotives was built in 1966 than in 1965, which also helped sales.

Shipments of both metal and composition brake shoes were up over the preceding year, and for the first time in several years, the percentage of new freight cars equipped with metal shoes increased.

Our new brake shoe, which provides a wholly new type of friction material combining the best characteristics of both composition and metal, went into limited commercial service during the year. The initial customer ac-



New jobs assigned to helicopters in war are expected to widen their application in peacetime. This Vertol Chinook relies on Abex landing gear, hydraulic pumps and servoactuators.

Essential to greater utilization of the railroad fleet will be automated yards like this one equipped for the Pennsylvania Railroad.

ceptance is very encouraging.

Orders for our new freight car brake are progressing at a satisfactory rate and it is planned to introduce another model during 1967.

Sales of freight car wheels also increased, and our three wheel plants operated at near capacity. Orders and backlog for wheels continue at high levels.

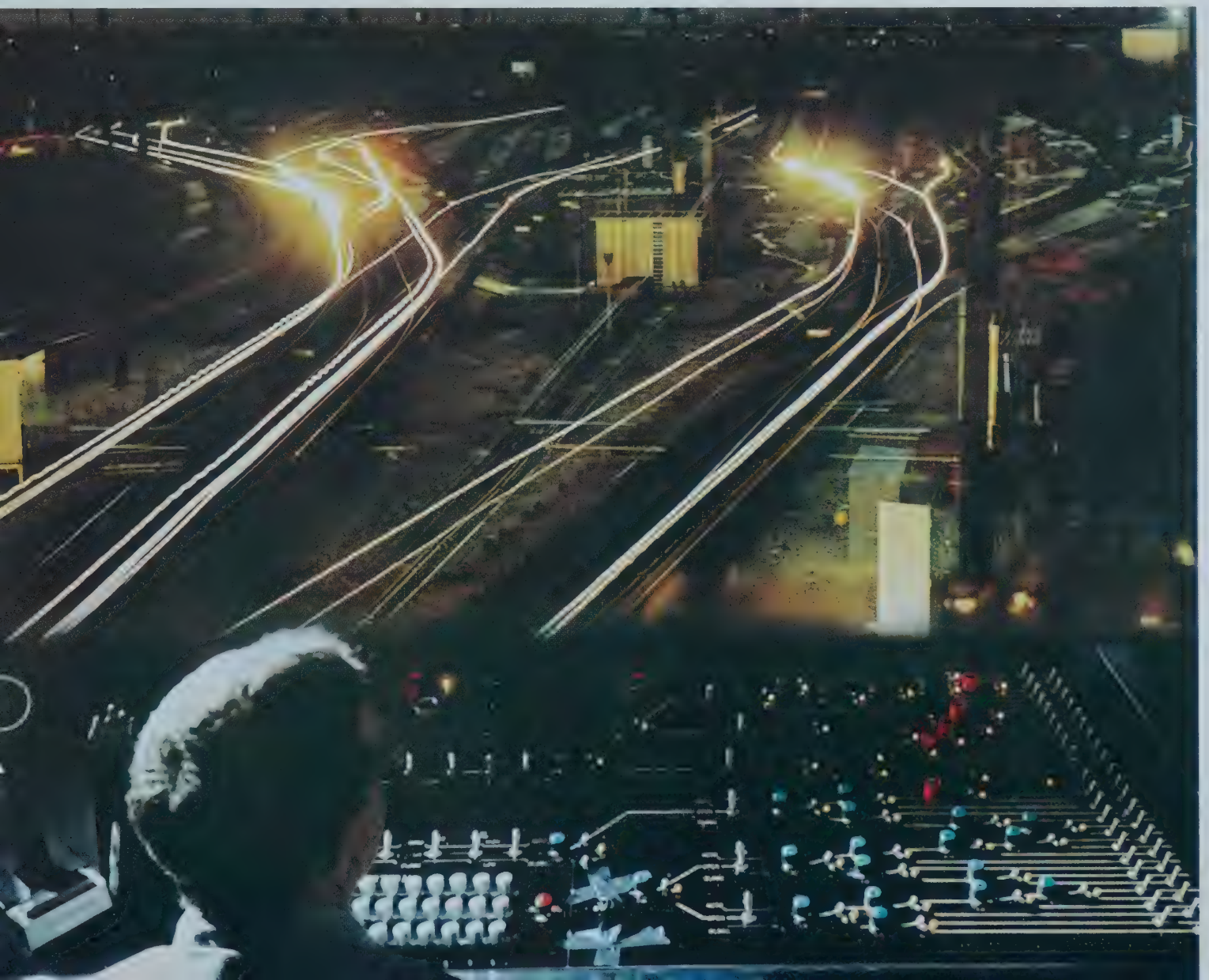
Sales of trackwork and related specialty products rose as increased traffic necessitated additional track maintenance and the roads spent more to

improve operating efficiency and reduce costs.

Three new "Economatic" freight yard installations were completed in 1966 and a large number of individual components were installed in existing yards. The "Economatic" yard consists of electronic speed and weight-sensing car retarders which are hydraulically powered. Centrally controlled switching machines, also operated by hydraulic power, switch rolling cars onto the desired tracks, then the retarder slows the car to a predetermined

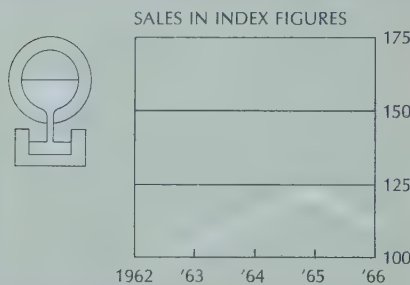
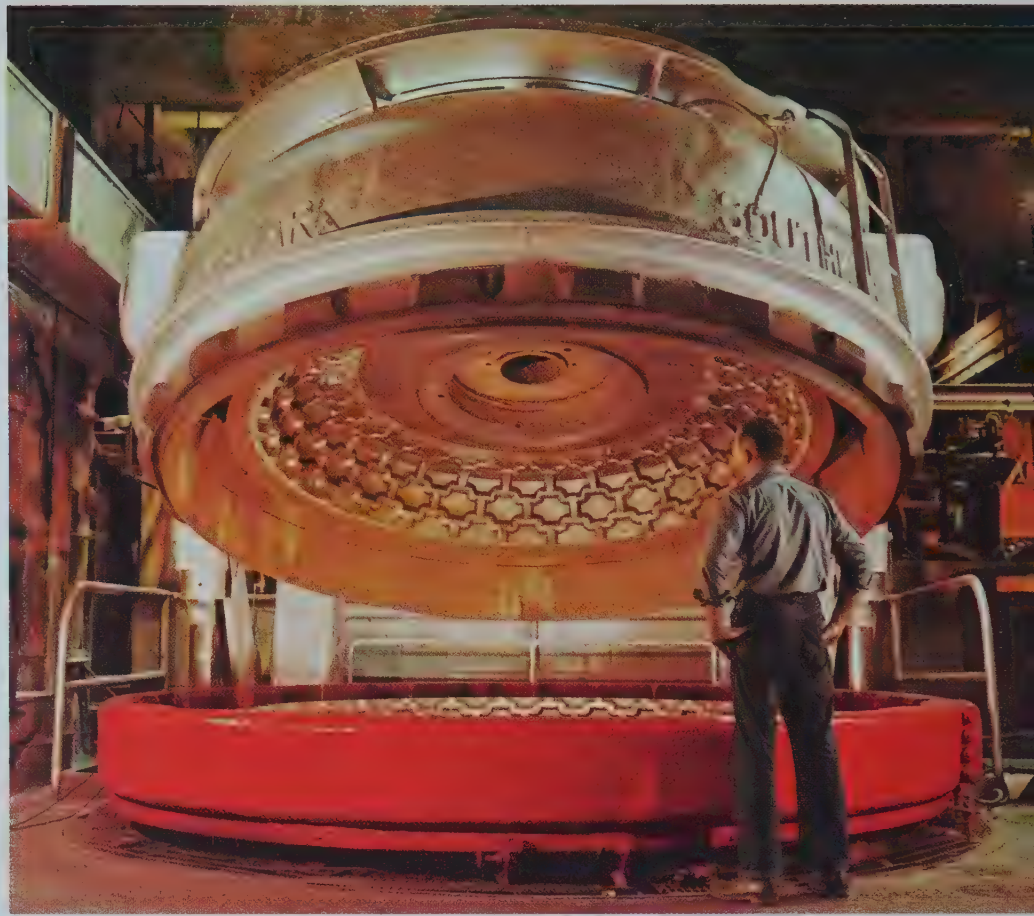
speed in order to control impact at coupling. The system saves manpower, speeds operation and reduces damage to freight. The existing installations have all proven to be both practical and economical and we expect that this product line will continue to gain acceptance.

Sales of both solid and SKF roller bearings increased in 1966. Our marketing arrangement with SKF Industries, Inc., which is the world's largest manufacturer of roller bearings, is proving to be mutually beneficial.



The new generation of railroad leaders is bringing creative management, innovation and new technology to the industry. Unit trains, specialized cars, automatic car identification and weighing, computerization and faster handling through yards are only a few of the approaches that will ultimately revolutionize the railroad industry. Furthermore, many mergers of railroads which have been accomplished or which are in the making will help to strengthen the combined roads. The long-range outlook for the railroads is excellent.

Cast Metal Products



Sales of cast metal products amounted to \$88,700,000. Shipments of products now included in this group increased 14% over 1965 although shipments for the group as a whole, were reduced because of the disposal of our forging business in late 1965. However, earnings and the return on investment by

this group improved substantially.

The strong demand for cast metal products in 1966 reflected the high level of activity in steel, mining, automotive, construction and other capital goods industries.

This product group is now efficiently organized into two divisions with nineteen manufacturing plants in the United States, Canada and Europe.

Shipments by Engineered Products Division of tire molds of all types increased. With the new tire mold plant in Belgium, we now have mold plants strategically located to serve the tire manufacturers in this country, Canada, England and continental European

countries. Tire mold sales will increase with the world-wide growth of automotive vehicles and rubber-tired mobile equipment.

This division also produces a broad group of highly specialized castings in iron, steel and non-ferrous alloys. Their uses are many and varied, ranging from television tube molds to blast furnace parts, from bearings to heat-resistant tubing, and as components for many types of machinery. Most of these castings demand a high degree of engineering and metallurgical know-how plus unusual production skill and close quality control.

The Amsco Division produces a

Molds to make tires for passenger cars, trucks, buses and off-highway equipment represent a growing market for Abex in North America and Europe.

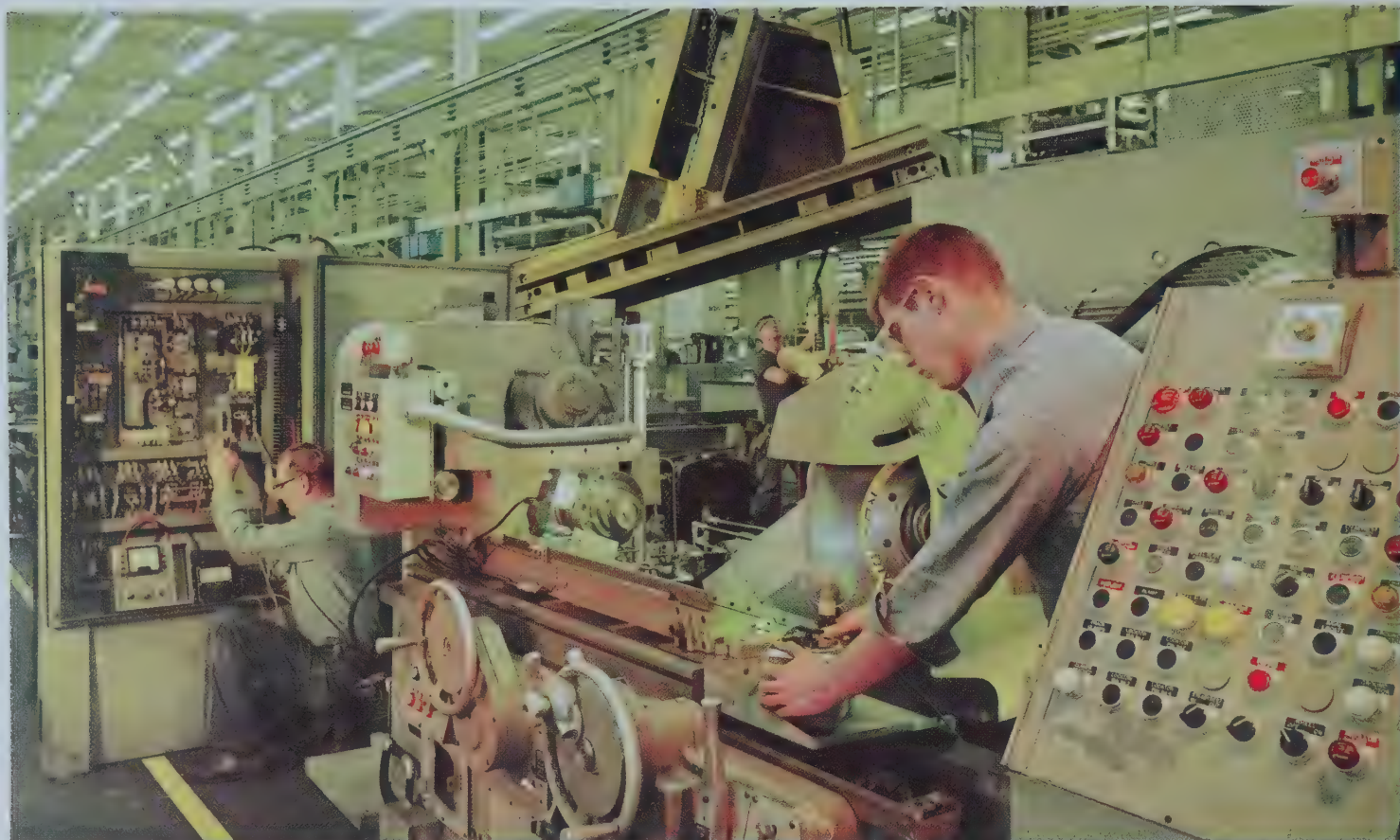
ABEX CORPORATION



From blast furnace to rolling mill the steel industry depends on Abex for ferrous and copper-base castings to fight heat, wear, impact and abrasion.

Lean taconite ore requires a great deal more processing than the rich iron ore formerly mined at Mesabi. These grinding mills are lined with Abex castings of abrasion-resistant alloy.

Machine tools, compressors, turbines and many other types of industrial machinery utilize a large volume of specialized Abex castings.



broad line of wear-resistant alloys which are used where service conditions are severe. These products are used in equipment for mining, earth-moving and steel-making, and include dredge pumps and dippers for power shovels. The division also has a line of specialty welding products which are used in allied applications. The demand for these products was strong last year and was given impetus by the

increased mining and processing of taconite ore in Minnesota.

The division's new plant at Two Harbors, Minnesota, was constructed during 1966. This additional capacity, close to the Iron Range, will enable us to serve our customers more efficiently and improve deliveries from other Amsco plants, which were operating at peak capacity during the entire year.

The performance of the cast metal

products group has improved greatly in the last five years. This is the result of careful selection of special products requiring higher grade materials and greater technological content, and the pruning of less desirable business. The broad diversity and growth prospects of its customer industries are reflected now in bright prospects for this group's future.

1966 Review

Sales and Earnings

Consolidated sales of the company in 1966 were \$277,399,000, up from \$260,168,000 in 1965, and the sixth consecutive year in which an increase was achieved. During the five years—1962-1966—our sales have grown at an annual compound rate of 11%, while the growth of all durable goods industries has been at the rate of 8% in this same period.

Net earnings for the year 1966 amounted to \$12,827,000 compared with \$11,104,000 in 1965 and showed an increase for the fifth consecutive year. Earnings have increased at a faster pace than sales, the growth having averaged almost 19% per year over the last five years.

These advances in sales and earnings have been made during a period when the economies of the developed coun-

tries of the free world were on a rising trend. While there is some uncertainty about economic conditions in the immediate future, there is little doubt about the upward trend in the years ahead. Consequently, it seems reasonable to believe that the company will maintain, over the long term, its recent average annual sales growth of about 10%.

An important fact about our sales is that a high percentage of our output is for replacement parts in contrast to parts for original equipment. Although there is no available means of obtaining precise data, our estimate is that replacement business amounts to about 70% of our total volume. This provides a built-in stability factor that can lessen the adverse effect on the company of a general business decline.

Orders and Backlog Reach New Records

Total orders received in 1966 amounted to \$307 million and they were in good balance among the four major product groups. The backlog of orders at year-end stood at a record \$109,700,000 up 30% from \$84,400,000 at the end of last year. About 30% of this backlog was for aerospace hydraulic products for both military and commercial planes and these orders have a long lead time from receipt of order to delivery because they are scheduled to coordinate with future production of the various aircraft.

Profitability Yardsticks Improve

Earnings before taxes as a per cent of sales increased to 9.5% from 8.3%, despite rising costs of both labor and materials during the year. This came about because of higher volume, improved efficiency, and some price increases. The net return on shareholders' equity amounted to 10.9%, a gain over the 9.8% return in 1965.

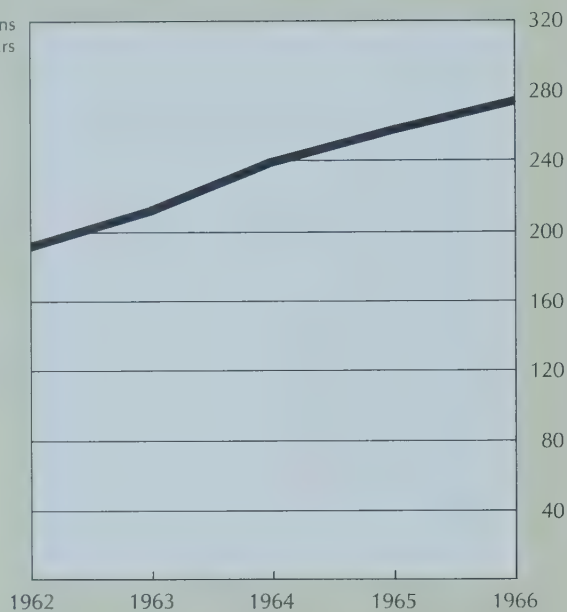
Financial Position is Strong

The company's financial position continued strong. The ratio of current as-

	1966		1965	
	Shipments	Earnings per share	Shipments	Earnings per share
First Quarter	\$ 67,054,000	\$.87	\$ 64,738,000	\$.76
Second Quarter	71,651,000	1.02	69,400,000	.85
Third Quarter	66,039,000	.59	59,583,000	.50
Fourth Quarter	72,655,000	1.01	66,447,000	.90
Total	\$277,399,000	\$3.49	\$260,168,000	\$3.01

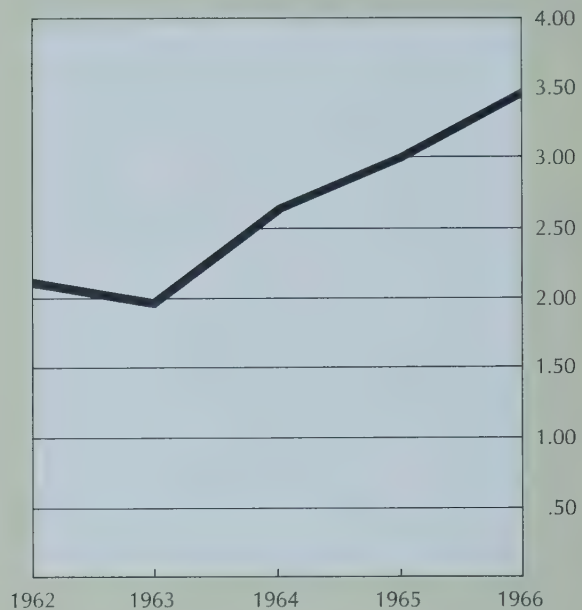
Shipments

In Millions
of Dollars



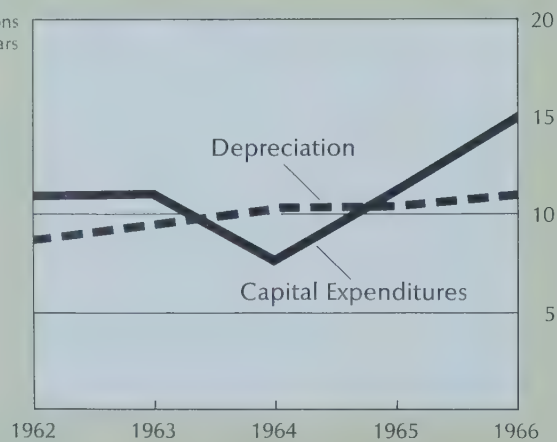
Earnings from Operations per Common Share

Dollars



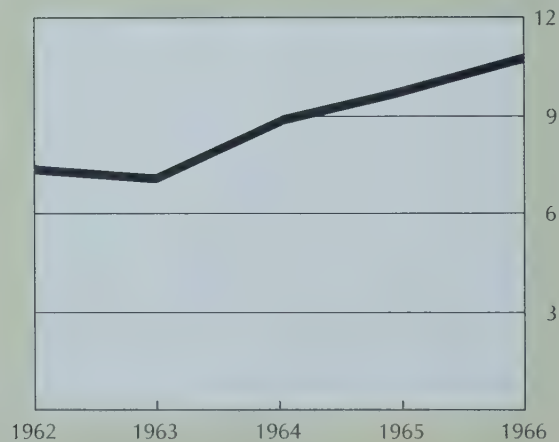
Capital Expenditures and Depreciation

In Millions
of Dollars



Return on Shareholders' Equity

Per Cent



sets to current liabilities was 3.03 compared with 3.86 at the end of 1965. Inventories increased to \$48,596,000 at year-end compared to \$43,161,000 at the beginning of the year. Most of the increase was in aerospace products where the work in process and backlog of orders increased and the inventories were necessarily higher.

Capital Expenditures Were High

Capital expenditures amounted to \$15,224,000 in 1966, compared with \$11,364,000 in the preceding year. Depreciation amounted to \$11,114,000 compared to \$10,533,000 in 1965.

An expansion program was initiated in 1965 to increase capacity in several product lines, including industrial hydraulic equipment, tire molds, friction products and certain types of castings. These additions have been mostly completed and the facilities are now in production.

Capital expenditures in 1967 are planned at approximately \$16,000,000. About 40% of the funds will be spent for added capacity at a number of existing plants. The balance of the capital funds will be spent on replacing and modernizing present machinery and equipment, and installing new equipment for cost reduction programs.

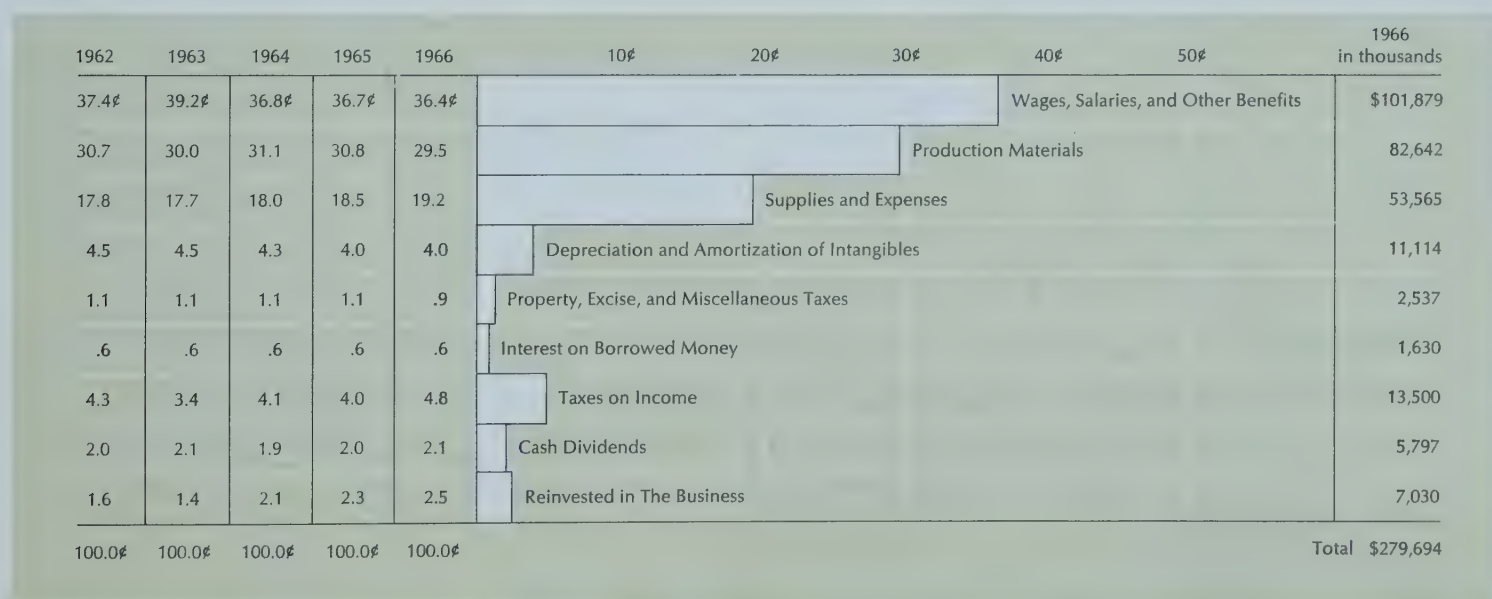
United States Operations

Sales of the United States divisions amounted to \$218,914,000 representing 79% of the consolidated total.

Defense business for our United States divisions amounted to about 10% of their volume. Although government expenditures for defense increased materially in 1966, our aerospace products were the only ones that were significantly affected.

Most of the plants operated at very high levels of production and, in many instances, we were hampered by a shortage of skilled and semi-skilled workers. Increased overtime and the

Distribution of the Income Dollar



expense of hiring, training and supervising many new employees increased costs. Nevertheless, the high volume, plus our continuing investment in cost reduction equipment and efforts to increase manufacturing efficiency, resulted in increased profitability.

Abex has numerous licensees in foreign countries and several new ones with significant potentials were added in 1966. Agreements were reached with companies in West Germany and France for the manufacture of our steel freight car wheels. Income from licensing activities has been increasing, and there are additional opportunities in many countries which are being explored.

Canadian and International Operations

Sales of our Canadian and International divisions were \$58,485,000, amounting to 21% of total consolidated volume.

Shipments of hydraulic equipment by the Jarry Hydraulics Division of Canada were much higher than in the preceding year because of the increased demand for military aircraft, but operating results were not satisfactory. A very high proportion of this division's products are for the United States military. This is consistent with the Defense Department's policy of coordination of the materiel program of

the United States with that of Canada. The backlog of orders indicates a continuing high level of production in 1967.

Business activity and industrial production were strong in Canada in 1966, particularly in mining and construction. Consequently, sales of our manganese and other alloy castings increased to a record high. Shipments of railroad products also improved.

Sales of automotive friction products in Europe rose substantially, reflecting the impact on sales of disc brake lining. Shipments of brake linings also increased in Mexico.

Shipments of industrial hydraulic equipment increased in France and Belgium but economic stagnation in England resulted in a sharp reduction in industrial output during 1966. This caused a decline in our sales. England's problems are formidable and the government has indicated that the period of "severe restraint" will continue in 1967.

In West Germany our sales declined as the country's production slowed considerably in 1966 under conditions of tight money and high interest rates. The outlook for 1967 is uncertain until the policies of the new government are established.

Shipments of tire molds in Europe increased, and production in the new

tire mold plant in Belgium is progressing on schedule. Most of the start-up costs in this plant have been absorbed.

The conditions described above, plus the amortization of intangibles and a write-off of goodwill had an over-all adverse effect upon operating results of the Canadian and International divisions. Improvement is expected in the current year.

Employee Relations

The number of employees at year-end had increased to 14,800 from 13,600 a year previously. Employees in the United States totaled 9,800. In the Canadian and International divisions they numbered 5,000.

During 1966 the company negotiated twenty union agreements at plants in the United States and Canada. There were two strikes during the year, one of twelve weeks involving a small number of employees in a brake shoe foundry on the West Coast and the other, of shorter duration, involving about 150 employees in a friction products plant in Ohio. Both strikes were settled on essentially the same terms the company offered before the strike.

Statement of Consolidated Earnings

Years Ended December 31, 1966 and 1965

INCOME	1966	1965
Shipments	\$277,398,557	\$260,168,235
Other income—net (note 2)	2,295,402	561,738
TOTAL	<u>279,693,959</u>	<u>260,729,973</u>
COSTS AND EXPENSES		
Materials, wages, and other costs	194,341,980	185,114,946
Selling, administrative, and research expense	34,827,222	30,524,618
Depreciation and amortization of intangibles	11,113,521	10,532,612
Repairs and maintenance of plant and equipment	8,917,501	8,563,024
Property, excise, and miscellaneous taxes	2,536,921	2,812,606
Interest	1,629,767	1,477,681
TOTAL	<u>253,366,912</u>	<u>239,025,487</u>
EARNINGS BEFORE TAXES ON INCOME	26,327,047	21,704,486
Provision for taxes on income (note 3)	13,500,000	10,600,000
NET EARNINGS	12,827,047	11,104,486
SPECIAL ITEM		
Loss on sale of forging facilities less related taxes on income	—	644,012
NET EARNINGS AND SPECIAL ITEM	<u>\$ 12,827,047</u>	<u>\$ 10,460,474</u>
PER SHARE OF COMMON STOCK OUTSTANDING		
AT END OF YEAR (note 4)		
Net earnings	\$3.49	\$3.01
Special item of loss	—	.18

Consolidated Balance Sheet

December 31, 1966 and 1965

Assets

CURRENT ASSETS	1966	1965
Cash	\$ 10,027,766	\$ 8,103,325
Short term investments—at cost (approximates market)	9,916,367	14,049,306
Accounts receivable	44,534,871	34,468,083
Inventories—at lower of cost or market (<i>note 5</i>)		
Raw materials and supplies	17,411,134	17,210,948
Finished product and work in process	31,184,960	25,949,769
TOTAL CURRENT ASSETS	<u>113,075,098</u>	<u>99,781,431</u>
 PROPERTY, PLANT, AND EQUIPMENT		
Buildings and equipment—at cost	157,594,098	146,550,312
Less depreciation	92,632,700	85,825,861
	<u>64,961,398</u>	<u>60,724,451</u>
Land—at cost	3,075,919	2,917,870
TOTAL PROPERTY, PLANT, AND EQUIPMENT	<u>68,037,317</u>	<u>63,642,321</u>
 OTHER ASSETS		
Prepaid expenses and sundry assets	4,039,353	3,671,302
Investments—at cost or less	4,058,425	4,268,004
Patents and other intangibles, less amortization	1,715,273	2,348,715
TOTAL OTHER ASSETS	<u>9,813,051</u>	<u>10,288,021</u>
	<u><u>\$190,925,466</u></u>	<u><u>\$173,711,773</u></u>

Liabilities

CURRENT LIABILITIES

	1966	1965
Current maturities on long term debt (note 6)	\$ 3,787,393	\$ 456,424
Notes payable to banks by Canadian subsidiaries	4,162,500	—
Notes payable to banks by European subsidiaries	3,921,671	2,245,555
Accounts payable	9,458,650	9,250,055
Accrued accounts	7,620,590	7,604,870
Accrued taxes on income	8,338,345	6,273,765
TOTAL CURRENT LIABILITIES	37,289,149	25,830,669

LONG TERM LIABILITIES

Long term debt (note 6)	27,391,521	28,122,381
Deferred income taxes (note 3)	4,822,295	4,790,000
TOTAL LONG TERM LIABILITIES	32,213,816	32,912,381

Shareholders' Equity

CAPITAL STOCK (notes 4, 7, and 8)

Common, no par—authorized 6,000,000 shares:

	1966	1965		
Issued	3,744,638	3,744,638	51,967,010	52,126,394
Treasury	70,915	57,152	1,982,527	1,565,765
Outstanding	3,673,723	3,687,486	49,984,483	50,560,629
EARNINGS REINVESTED IN THE BUSINESS (notes 6 and 9) . .			71,438,018	64,408,094
TOTAL SHAREHOLDERS' EQUITY			121,422,501	114,968,723
			\$190,925,466	\$173,711,773

Consolidated Statement of Source and Disposition of Funds

Years Ended December 31, 1966 and 1965

SOURCE OF FUNDS	1966	1965
Net earnings (less special item in 1965)	\$12,827,047	\$10,460,474
Depreciation and amortization of intangibles	11,113,521	10,532,612
Increase in long term liabilities	3,360,400	1,626,798
Retirement of property, plant, and equipment—net	555,377	4,144,496
TOTAL	<u>27,856,345</u>	<u>26,764,380</u>
DISPOSITION OF FUNDS		
Expenditures for property, plant, and equipment . .	15,223,993	11,363,599
Dividends paid	5,797,123	5,271,551
Common stock purchases less sales to employees	576,146	728,161
Retirement of long term liabilities	4,058,965	1,916,424
Increase in other assets	364,931	2,321,963
Increase in working capital, excluding cash and equivalent	4,043,685	2,462,982
TOTAL	<u>30,064,843</u>	<u>24,064,680</u>
INCREASE/DECREASE IN CASH AND EQUIVALENT	2,208,498	2,699,700
CASH AND EQUIVALENT		
Beginning of year	22,152,631	19,452,931
End of year	<u>\$19,944,133</u>	<u>\$22,152,631</u>

Accountants' Opinion

THE BOARD OF DIRECTORS AND SHAREHOLDERS OF ABEX CORPORATION:

We have examined the consolidated balance sheet of ABEX CORPORATION and its subsidiaries as of December 31, 1966, and the related statements of consolidated earnings and earnings reinvested in the business (note 9) for the year then ended. Our examination was made in accordance with generally accepted auditing standards, and accordingly included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances. We previously examined and reported upon the consolidated financial statements of the Company and its subsidiaries for the year 1965.

In our opinion, the aforementioned consolidated financial statements present fairly the financial position of the Company and its subsidiaries at December 31, 1966 and 1965 and the consolidated results of their operations for the years then ended, in conformity with generally accepted accounting principles applied on a consistent basis.

We have also examined the consolidated statement of source and disposition of funds of the Company and its subsidiaries for the years ended December 31, 1966 and 1965, which statement, in our opinion, is fairly presented.

LYBRAND, ROSS BROS. & MONTGOMERY

New York, February 3, 1967

Notes to Consolidated Financial Statements

1. The consolidated financial statements include the accounts of the Company and its wholly-owned Canadian and International subsidiaries. The net assets of such subsidiaries including loans and advances from the Company amounted to \$34,503,389 at December 31, 1966 and \$32,158,796 at December 31, 1965. For the year ended December 31, 1966 the net losses of such subsidiaries were \$2,148,046 after amortization of intangibles and a write-off of goodwill amounting to \$1,407,384 and the payment of technical service fees, administrative charges, and interest to the Company totalling \$1,648,025. In the year ended December 31, 1965 the net earnings of these subsidiaries were \$886,328 after amortization of intangibles amounting to \$230,465 and the payment of technical service fees, administrative charges, and interest to the Company totalling \$955,654.
2. Included in the caption Other income-net on the Statement of Consolidated Earnings in the year ended December 31, 1966 are gains which arose upon the disposition of securities previously held for investment amounting to \$1,515,155, and a write-off amounting to \$800,000 which represents the Company's estimate of the decline in value of purchased goodwill.
3. Depreciation has been provided by the Company and its subsidiaries generally at rates calculated to absorb the cost of buildings and equipment during the period of their useful lives. Where permitted by income tax laws, the Company and certain of its subsidiaries deduct larger amounts of depreciation for income tax purposes than are charged against net earnings. The reductions in tax liabilities resulting from this practice are not credited to net earnings but are accumulated in deferred income taxes, displayed separately on the consolidated balance sheet.
4. The financial data in this report have been adjusted to reflect the increase in authorized shares to 6,000,000 and the two-for-one stock split approved by the shareholders on April 26, 1966.
5. At December 31, 1966, 25% of total inventories, measured by approximate current cost, are stated on the last-in, first-out basis. Such cost exceeds the last-in, first-out value by \$4,742,000.
6. Long term debt at December 31, 1966 includes the following:

	Due Within One Year	Due After One Year
Abex Corporation		
4½% sinking fund debentures due 1982	\$ —	\$ 9,533,000
4½% sinking fund debentures due 1987	—	11,127,000
Canadian Subsidiaries		
Amount due January 16, 1967 on purchase of		
Jarry Hydraulics Limited	3,020,378	—
Amount due Canadian government on purchase of equipment ..	44,993	157,992
European Subsidiaries		
Notes payable (3.8%-7%) due 1967-1986	722,022	6,573,529
Total long term debt	<u>\$3,787,393</u>	<u>\$27,391,521</u>

Under the terms of the indentures covering sinking fund debentures, minimum annual sinking fund payments are required as follows: 1968, \$710,000; 1969-1971, \$900,000; 1972-1981, \$1,300,000; 1982, \$1,150,000; 1983-1986, \$650,000; and 1987, \$500,000.

The indentures covering the debentures contain restrictions, among others, against the payment of dividends (other than stock dividends), the redemption of capital stock, and investment in subsidiaries in areas other than the United States and Canada. The amount free of such restrictions at December 31, 1966 under the most restrictive covenant was \$20,704,000.

7. Issuance of not more than 200,000 shares, in series, of cumulative preferred stock, par value \$100, has been approved by the shareholders.

8. At December 31, 1965, options were outstanding to purchase 95,924 shares of common stock of the Company under the Employees' Stock Purchase and Option Plan adopted in 1957, at prices ranging from \$21.03 to \$26.94 per share. During the year 17,437 shares were purchased under the plan at a total purchase price of \$422,111 and options to purchase 4,064 shares were canceled, leaving 74,423 shares under option at December 31, 1966 all of which were exercisable. No shares were available for the granting of additional options at any time during the year.

9. The details of consolidated earnings reinvested in the business are as follows:

	1966	1965
Beginning of year	\$64,408,094	\$59,219,171
Net earnings and (in 1965) special item	12,827,047	10,460,474
Total	77,235,141	69,679,645
Cash dividends on common stock, \$1.575 per share in 1966 and \$1.425 per share in 1965	5,797,123	5,271,551
End of year	<u>\$71,438,018</u>	<u>\$64,408,094</u>

10. Reference should be made to information concerning a Federal Trade Commission proceeding appearing on page 5 of this report.

Ten Year Review

Earnings and Dividends

	1966
Shipments	277,399
Earnings before taxes	26,327
Per cent of shipments	9.5
Per cent of capital employed	17.5
Net earnings	12,827
Per cent of shipments	4.6
Per cent of common stock equity	10.9
Per common share	3.49
Dividends paid	5,797
Per cent of net earnings	45.2
Employees—end of year	14,850
Payrolls	
Wages and salaries	89,681
Cost of employee security	12,198
Total	101,879
Employee security as a per cent of payroll	13.6
Shipments per employee	19,484
Capital employed per employee	10,589
Dividends per common share	1.575

Financial Position

Capital employed	
Cash and equivalent	19,944
Accounts receivable	44,535
Inventories	48,596
Total current assets	113,075
Current liabilities	37,289
Working capital	75,786
Property, plant, and equipment	68,037
Other assets	9,813
Total capital employed	153,636
Financed by	
Long term liabilities	32,214
Preferred stock	—
Common stock equity	121,422
Total capital employed	153,636
Shareholders' equity per common share	33.05
Thousands of common shares outstanding	3,674
Number of common shareholders	18,131
Current ratio	3.0
Expenditures for property, plant, and equipment ...	15,224
Depreciation and amortization of intangibles	11,114

In 1961 there was a special item of income from an excess profits tax refund for the years 1950-1953 amounting to \$995,000.

The year 1963 includes the operations of The S. K. Wellman Company acquired in that year in a transaction which for accounting purposes was treated as a pooling of interests.

In 1965 there was a special item of loss amounting to \$644,012 after related taxes on income resulting from the sale of forging facilities.

Common shares outstanding and per common share figures for all years have been adjusted to reflect a two-for-one stock split in 1966.

Dollars expressed in thousands except per common share and per employee figures

1965	1964	1963	1962	1961	1960	1959	1958	1957
260,168	241,478	214,669	194,892	165,504	164,587	168,029	137,998	186,851
21,704	19,662	14,741	15,454	11,270	11,967	16,081	9,813	20,283
8.3	8.1	6.9	7.9	6.8	7.3	9.6	7.1	10.9
14.9	14.0	10.9	12.9	10.2	11.2	15.3	9.5	21.1
11,104	9,762	7,441	6,954	5,370	5,667	7,681	4,778	9,124
4.3	4.0	3.5	3.6	3.2	3.4	4.6	3.5	4.9
9.8	9.0	7.1	7.4	5.9	6.4	9.0	5.8	11.3
3.01	2.64	2.00	2.13	1.64	1.74	2.36	1.48	2.83
5,272	4,642	4,453	3,913	3,915	3,903	3,877	3,867	4,570
47.5	47.6	59.9	56.3	72.9	68.9	50.5	80.9	50.1
13,624	13,535	12,869	11,622	10,680	9,732	9,134	8,395	9,859
83,725	78,208	74,063	64,910	53,528	51,189	50,644	44,845	55,465
11,910	10,760	10,317	8,323	6,967	7,484	6,280	5,660	5,978
95,635	88,968	84,380	73,233	60,495	58,673	56,924	50,505	61,443
14.2	13.8	13.9	12.8	13.0	14.6	12.4	12.6	10.8
19,158	18,291	17,034	17,478	16,216	17,448	19,170	15,120	18,482
10,736	10,624	10,720	10,709	10,806	11,375	12,015	11,375	9,490
1.425	1.25	1.20	1.20	1.20	1.20	1.20	1.20	1.45
22,152	19,453	13,945	17,083	12,535	12,928	23,130	19,168	20,210
34,468	35,093	31,526	28,188	25,100	18,482	17,441	17,184	18,489
43,161	39,930	36,071	31,621	28,973	25,953	23,225	20,109	24,954
99,781	94,476	81,542	76,892	66,608	57,363	63,796	56,461	63,653
25,830	25,688	23,545	24,202	24,584	16,493	18,586	13,652	19,541
73,951	68,788	57,997	52,690	42,024	40,870	45,210	42,809	44,112
63,642	66,502	69,042	64,460	63,386	59,060	55,395	57,425	56,680
10,288	8,420	9,767	8,750	7,514	7,726	6,340	3,442	3,173
147,881	143,710	136,806	125,900	112,924	107,656	106,945	103,676	103,965
32,912	33,202	30,778	30,516	20,281	17,678	18,815	20,310	21,190
—	—	—	—	—	—	—	—	475
114,969	110,508	106,028	95,384	92,643	89,978	88,130	83,366	82,300
147,881	143,710	136,806	125,900	112,924	107,656	106,945	103,676	103,965
31.18	29.84	28.48	29.28	28.34	27.62	27.10	25.88	25.62
3,687	3,703	3,723	3,257	3,269	3,258	3,252	3,222	3,212
17,120	17,084	17,174	17,474	17,084	16,256	15,884	15,979	15,870
3.9	3.7	3.5	3.2	2.7	3.5	3.4	4.1	3.3
11,364	7,913	11,125	11,103	12,609	12,119	4,868	8,068	11,406
10,533	10,423	9,646	8,851	7,662	7,680	7,280	6,817	6,703

Products and Divisions

Friction Products

Aircraft, automotive and industrial friction products for braking and power transmission applications.

AMERICAN BRAKEBLOK DIVISION, Troy, Michigan

MAYNARD B. TERRY, *President*

Plants: United States, Canada, France, Mexico

S. K. WELLMAN DIVISION, Bedford, Ohio

GEORGE L. ROMINE, *President*

Plants: United States, Canada

Hydraulic Equipment

Hydraulic systems, pumps, motors, valves, controls, presses, aircraft landing gear, actuators and structural components; strain gage transducers.

AEROSPACE DIVISION, Oxnard, California

GEORGE N. DECKER, *President*

Plants: United States, West Germany

DENISON DIVISION, Columbus, Ohio

PAUL W. NORRIS, *President*

Plants: United States, Belgium, England, France, Japan, West Germany

DYNISCO DIVISION, Cambridge, Massachusetts

WILLIAM P. MUNGER, *Division Director*

JARRY HYDRAULICS DIVISION, Montreal, Canada

ALLAN C. MAC DONALD, *President*

Railroad Products

Brake shoes, bearings, freight car wheels, components and special systems for railroad track and yards.

RAILROAD PRODUCTS DIVISION, New York, N. Y.

RAYMOND A. FRICK, *President*

Plants: United States, Canada

Cast Metal Products

Manganese and alloy steel castings, dredge pumps, welding products; precision ferrous and non-ferrous castings, tire molds and bearings.

AMSCO DIVISION, Chicago, Illinois

GILFRY WARD, *President*

Plants: United States, Canada, Mexico

ENGINEERED PRODUCTS DIVISION, New York, N. Y.

N. GEORGE BELURY, *President*

Plants: United States, Canada, Belgium, England

Abex
CORPORATION

